

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-6 - Cancelled.

7. (Currently Amended)) An MRI apparatus which comprises an MRI shim coil having one or more coil sections containing a plurality of layers with of windings made of insulated conductor, each layer having a plurality of layers of windings made of insulated conductor, each layer having a plurality of turns, wherein ~~the MRI shim coil is~~ said one or more coil sections are each wound in two or more sub-sections, each sub-section of the MRI coil section incorporating some or all of said plurality of layers, and having fewer turns per layer than the coil section of which it forms a part whereby reduction of a self-resonant frequency of the shim coil can be reduced ~~but only some of the turns in each layer.~~

8. (Currently Amended) An MRI apparatus as in claim 7 wherein insulating material is disposed between each layer of turns in addition to ~~the~~ insulation otherwise disposed about each said insulated conductor.

9. (Previously Presented) An MRI apparatus as in claim 8 wherein the insulating material is glass cloth.

10-15. Cancelled

16. (New) A method for reducing a self-resonant frequency of an MRI shim coil, said method comprising:

arranging an MRI shim coil in plural coil sections, each section containing a plurality of layers of windings made of insulated conductor, each layer having a plurality of turns; and

arranging each of said coil sections in two or more sub-sections, each sub-section incorporating turns in at least one of said plurality of layers whereby reduction of the self-resonant frequency of the shim coil can be reduced.